



Attorney Docket: 951/49617
PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: MARKUS WIMMER ET AL.
Serial No.: 09/873,290 Group Art Unit: 3663
Filed: JUNE 5, 2001 Examiner: Ronnie M. Mancho
Title: PROCESS AND APPARATUS FOR DETECTING DAMPER
DAMAGE

**REPLY BRIEF AND
REQUEST FOR ORAL HEARING**

Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

July 8, 2003

Sir:

The following is submitted in response to the Examiner's Answer mailed June 18, 2003 regarding the above-identified application.

In paragraph (11) captioned "Response to Argument", the Examiner makes the following arguments:

1. The Appellants' argument about radial acceleration makes no sense since radial acceleration was not claimed (page 7, "Response to Argument");
2. The Appellants have mischaracterized the Magiawala reference by interpreting "radial acceleration" in Magiawala et al as acceleration of the wheel or tire in a direction perpendicular to the axis of rotation (page 8, lines 1-5);

3. The Appellants have given no reason why radial acceleration in Magiawala et al differs from rotational wheel speed of an ABS sensor (page 8, lines 5-6; and

4. Magiawala et al discloses detecting wheel speed signals of an antilock braking system (page 8, lines 20-22).

In response to these items, Appellants note the following:

First, the Examiner is correct that the claims do not recite "radial acceleration" and do not incorporate any limitation which includes radial acceleration. The inference which the Examiner has drawn from this proposition, however, is incorrect. That is, Appellants' arguments are not predicated on any limitation of the claims to "radial acceleration". Rather, the opposite is true. Appellants' point is that, quite the contrary, Claim 1 defines a system which detects and utilizes wheel speed, not radial acceleration, as an indicator for determining the condition of a shock absorber. Magiawala et al, on the other hand, contains no provision for using wheel speed in this manner.

With regard to the meaning of the term "radial acceleration" as used in Magiawala et al, the definition provided in the Appellants' Appeal Brief does not constitute Appellants' "interpretation" of Magiawala et al. Rather, it is taken directly from the text of the Magiawala et al reference, as follows:

"By radial acceleration is meant the acceleration of the wheel or tire in a radial direction, i.e., in a direction

perpendicular to the axis of rotation of the tire." (See Column 3, lines 50-53.)

(As noted at Column 3, line 66 through Column 4, line 4, "a conventional two axis accelerometer is used to detect such radial acceleration".) Hence, Appellants respectfully submit that the description of Magiawala et al in the Appeal Brief is correct, and that Appellants have not in any way misrepresented the content of the Magiawala et al disclosure.

It is noteworthy in this regard, that at page 8, lines 16-18 of the Examiner's Answer, the Examiner appears to have equated the term "radial acceleration" as used in Magiawala et al as "spinning of the wheels". This interpretation directly contradicts the definition of the term "radial acceleration" provided by Magiawala et al itself, as noted above. In addition, it also conflicts with the definition of "tangential acceleration", which is defined at Column 4, lines 2-4 as "acceleration in the tangential direction of the circumference of the wheel".

With regard to the Examiner's observation that the Appellants did not give any reason why they think that radial acceleration as defined in Magiawala et al is different from rotational wheel speed of an ABS system, it is submitted that the difference is self-evident. The term "wheel speed signals of an anti-lock braking system rotation wheel speed sensor" clearly refers to signals from an ABS system that indicate the angular velocity of the wheel ("wheel speed") as it rotates on the vehicle. This differs from "acceleration of the wheel or tire in a

radial direction, i.e., in a direction perpendicular to the axis of rotation of the tire" as defined and utilized in Magiawala et al.

Finally, with regard to the Examiner's statement that Magiawala et al discloses detecting wheel speed signals of an anti-lock braking system, Appellants note that the portions of the specification referred to by the Examiner are clearly directed to the proposition that the method and apparatus disclosed in Magiawala et al can be used "to replace the wheel speed sensors currently being used" in ABS system". (See Column 7, lines 24-25.) Consistently, the specification at Column 7, lines 63-65 states that the radial signal frequency utilized therein "can be used as an indication of wheel rotational speed for ABS and IVC applications". In other words, such radial signal frequency values in the range of 0 to 25 Hz can be used to determine wheel speed. The Magiawala et al reference contains no ABS system, no wheel speed sensors, and no provision for providing or utilizing wheel speed signals of an ABS system for determination of the condition of the shock absorber.

For the reasons set forth above, Appellants respectfully submit that Claims 1, 2, 9, 19 and 20 of the present application are not anticipated by Magiawala et al, and are allowable, as indicated in Appellants' Appeal Brief submitted April 22, 2003.

A triplicate copy of Appellants' Reply Brief is attached.

Appellants hereby request an oral hearing in connection with the above-identified application and hereby submit the required filing fee of \$280.00 under 37 CFR 1.17(g).

It would be appreciated if the undersigned were telephoned in the event there are any questions related to this response or the application in general.

It is respectfully requested that, if necessary to effect a timely response, this paper be considered as a Petition for an Extension of Time sufficient to effect a timely response and shortages in other fees, be charged, or any overpayment in fees be credited, to the Deposit Account of Crowell & Moring LLP, Account No. 05-1323 (Docket #951/49617).

Respectfully submitted,



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